InCom Working Group 30

Terms of Reference

"Inventory of Innovative Inspection and Repair Techniques of Inland Navigation Structures (Steel, Concrete, Masonry and Timber) both Underwater and In-the-Dry"

InCom Working Group 30

History

"A large percentage of lock, dam and flood control projects are reaching the end of their design lives. Funds to repair or replace existing infrastructure projects are typically scarce. As a result, cost effective maintenance and repair of these projects is vital to the commerce and welfare of the industries and populations that these systems support. The objective of this working group will be to compile methods, materials, and procedures that are used to extend, preserve, or maintain the operational viability of these inland projects."

InCom Working Group 30

Objective

"The work will consist of collecting and compiling information from a variety of agencies and operators throughout the PIANC membership on the methods, tools, materials, and equipment that are used in the preservation and maintenance of these structures."

InCom Working Group 30

Members

Brahim Benaissa - France
Hans Joachim Uhlendorf - Germany
Andreas Hüsig - Germany
Hiroshi Yokota - Japan
Jukka Tuovinen - Finland
Astrid Laemont - Belgium
Eric Van Draege (New Chairman) - Belgium
Peter Van Besien - Belgium
Vladimir Holcik - Slovakia
Rafael Vara - Spain
Ronald Heffron - United States
Chad Linna - United States
Bob Willis (Original Chairman) - United States (Has Retired)

US Army Corps of Engineers®

One Team—Relevant, Ready, Responsive, Reliable

GREAT LAKES & OHIO RIVER DIVISION

InCom Working Group 30

Members

InCom Working Group 30

Meetings:

- October 2006 (Brussels)
- March 2007 (Lyon, France)
- June 2007 (Finland)
- September 2007 (Louisville, Kentucky)
- February 2008 (Bratislava, Slovakia)
- June 2008 (Hannover, Germany)
- October 2008 (Tokyo, Japan)
- Final Report to PIANC Commission (Fall ‘08)

InCom Working Group 30

The Working Group struggled for months with efforts in collecting "innovative inspection and repair" methods from countries throughout the world. Examples of methods for the Final Report:

- **Permanent sensors / cubes to measure movement in navigation structures**
- **Acoustic Positioning Equipment; Krech-Ojard example for 3D referencing**
- **Caissons for replacing roller gate rails**
- **Water filled dam**
- **One layer coating system for steel**
- **Osmotic pulsation**
- **Service life modeling**
- **Lithium protection**
- **Constant pressurized tube for sealing joints**
- **Rehabilitation of miter gate sill using a diamond wire saw**
- **Use of "Gravity Dam" in place of degraded "Poiree Dam"**
- **Use of temporary miter gate Anchorage System**

US Army Corps of Engineers®

One Team—Relevant, Ready, Responsive, Reliable

GREAT LAKES & OHIO RIVER DIVISION

InCom Working Group 30

Gravity Dam Placement on the Ohio River

US Army Corps of Engineers®

One Team—Relevant, Ready, Responsive, Reliable

GREAT LAKES & OHIO RIVER DIVISION

InCom Working Group 30

Portable Coffer Dam Adjustable to Various Structures

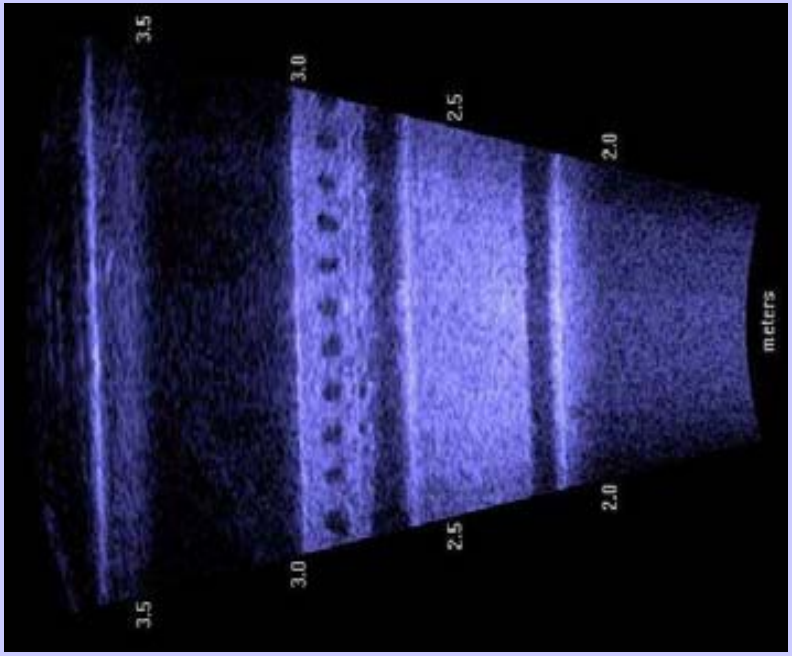
US Army Corps of Engineers®

One Team—Relevant, Ready, Responsive, Reliable

GREAT LAKES OHIO RIVER DIVISION

InCom Working Group 30

High Resolution Acoustic Imaging System



InCom Working Group 30

Please direct questions and comments to:

Chad Linna
Operations Maintenance Manager
Great Lakes & Ohio River Division (LRD)
(513) 684-2035
Chad.A.Linna@usace.army.mil